

3-bin turning unit



A 3-bin turning unit is a series of three or more bins that allows yard debris to be turned on a regular schedule. Turning units are most appropriate for gardeners with a large volume of yard debris and the desire to make a high-quality compost in a short period of time.

What debris? Yard debris such as fallen leaves, weeds, spent garden plants and grass clippings are excellent compost materials. Kitchen scraps can also be composted, but care needs to be taken with these materials to avoid attracting vermin and producing odors. Do not put meat, bones, dairy products like milk and cheese, and cooking and salad oils in the compost pile. (For details on composting food scraps refer to our *Food Scraps Composting* leaflet.)

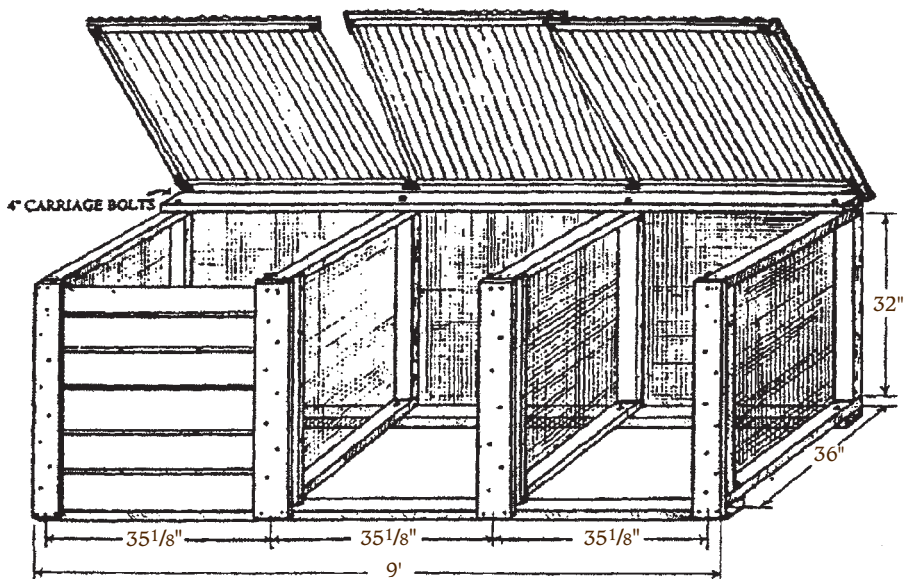
How? Mix high-carbon and high-nitrogen materials to a ratio of 1:1 by volume. These should be moistened to the damp sponge stage. The pile temperature should be checked regularly. When the heat decreases substantially, turn the pile into the next bin. Then make a new pile in the original bin. Turn the material in the second bin into the third bin where it will remain until ready for use. Repeat the process each time the pile in the first bin cools. For more complete information on home composting, see our *Home Composting* leaflet or call a Master Composter/Recycler at (360) 882-4567.

Advantages and disadvantages. This method produces high-quality compost in a short time using a substantial input of materials and labor.



Recycled Recyclable

Variations. This unit can be built of wood, a combination of wood and wire, or concrete block.



This unit can be built for approximately \$200. Construction requires basic carpentry skills and tools.

Materials:

- 2—2"x4"x18'
- 4—2"x4"x12' (or 8—2"x4"x6')
- 5—2"x2"x6'
- 10—2"x2"x3'
- 1—2"x6"x16' cedar
- 9—1"x6"x6' cedar
- 22' of 36" x 1/2" hardware cloth
- 12—1/2" carriage bolts 4" long
- 3 lbs. 16d galvanized nails
- 250 poultry wire staples or power stapler with 1" staples
- 3—36 1/8" x 36" x 5/8" exterior plywood
- 6—4" zinc strap hinges for lid
- 11 flat 4" corner braces with screws

Tools:

Hand saw or circular power saw, drill with 1/2" and 1/8" bits, screwdriver, hammer, tin snips, tape measure, pencil, 3/4" socket or open end wrench, carpenter's square (option—power stapler with 1" long galvanized staples). *Use eye and ear protection.*

Construction details:

Build Dividers: Cut two 31 1/2" and two 36" lengths from each 2"x4"x12'. Butt end nail the four pieces into a 35"x36" square. Repeat for other three sections. Cut four 37" long sections of hardware cloth, bend back edges 1". Stretch hardware cloth across each frame, check for squareness of the frame and staple screen tightly into place every 4" around edge.

Set up Dividers: Set up dividers parallel to one another 3' apart. Measure

and mark centers for the two inside dividers. Cut four 9' lengths out of the two 2"x4"x18' boards. Place two 9' base boards on top of dividers and measure the positions for the two inside dividers. Mark a center line for each divider on the 2"x4"x9'. With each divider, line up the center lines and make the base board flush against the outer edge of the divider. Drill a 1/2" hole through each junction centered 1" in from the inside edge. Secure base boards with carriage bolts, but do not tighten yet. Turn the unit right side up and repeat the process for the top 9' board. Using the carpenter's square, measure between opposing corners making sure the bin is square, and tighten all bolts securely. Fasten a 9' long piece of hardware cloth securely to the back side of the bin with staples every 4 inches around the frame.

Front Slats and Runners - Cut four 2"x6"x3' for front slat runners. Rip cut two of these boards to 4³/₄" wide and nail them securely to the front of the outside dividers and baseboard, making them flush on top and outside edges. Save remainder of rip cut boards for use as back runners. Center the remaining full width boards on the front of the inside dividers flush with the top edge, and nail

securely. To create back runners, cut the remaining 2"x6" into a 34" long piece and then rip cut into 4 equal pieces, 1¹/₄"x2". Nail back runner parallel to front runners on side of divider, leaving a 1" gap for slats. Cut all the 1"x6" cedar boards into slats 31¹/₄ " long.

Lid - Cut four 2"x2"x32¹/₂" and two 2"x2"x35¹/₂" and four 2"x2"x36". Center lid frame, brace side down on bin structure and attach with hinges. Nail 2"x2" to underside of plywood lids. Note center lid is 35¹/₈" x 36". The outer lids are 36"x36". Attach strap hinges to lids, position on bin top to attach.

For more information

For more composting information, contact a Master Composter/Recycler at Columbia Springs Environmental Education Center, (360) 882-4567. The Master Composter/Recycler program offers free composting workshops, composting how-to information, low-cost worm bin composting workshops, composting books to purchase, Master Composter/Recycler volunteer training, a reduced price compost bin, composting demonstration sites, teacher worm bin workshops, and speakers for neighborhood or community groups.



The Master Composter/Recycler program

is a cooperative effort of Clark County, Vancouver, Camas, Washougal, Battle Ground, Ridgefield, Yacolt, La Center and Columbia Springs Environmental Education Center. For information, please call (360) 882-4567.



For an alternative format, contact the Clark County ADA Compliance Office.
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